

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1 (currently amended). A method of producing an integrated transgene in an avian blastodermal cell comprising:

introducing a nucleic acid comprising an antibiotic resistance marker into an avian blastodermal cell by electroporating; and

allowing the cell to undergo a cellular division;  
thereby producing an integrated transgene in an avian blastodermal cell.

2 (previously presented). The method of claim 1 comprising allowing the cell to undergo a division in the presence of chick embryo extract.

3 (previously presented). The method of claim 1 wherein the transgene is stably integrated.

4-7 (canceled)

8 (previously presented). The method of claim 1 wherein the marker is puromycin resistance.

9 (currently amended). The method of claim 1 wherein the avian cell is a ~~blastodermal~~ cell in culture.

10 (previously presented). The method of claim 1 wherein the electroporating introduces a double stranded break in a nucleic acid.

11-32 (canceled).

33 (currently amended). A method of producing an integrated transgene in a totipotent

avian cell comprising:

introducing a nucleic acid comprising an antibiotic resistance ~~non-lethal~~ marker gene into ~~an~~  
a totipotent avian cell by electroporating; and

allowing the cell to undergo a cellular division;

thereby producing an integrated transgene in a totipotent avian cell.

34 (previously presented). The method of claim 33 comprising allowing the cell to undergo a division in the presence of chick embryo extract.

35 (previously presented). The method of claim 33 wherein the transgene is stably integrated.

36-39 (canceled)

40 (previously presented). The method of claim 33 wherein the marker is puromycin resistance.

41 (currently amended). The method of claim 33 wherein the avian cell is a ~~blastodermal cell~~ in culture.

42 (previously presented). The method of claim 33 wherein the electroporating introduces a double stranded break in a nucleic acid.